

hip and knee arthroplasty registry in a surgical clinical practice were identified between 2008 to 2010 and followed over 2 years. Each patient visit was included in the analysis. Additionally, preoperative patient and clinical factors were identified from the electronic medical record. Hierarchical linear models were used to assess patient and clinical risk factors associated with physical function (Physical component score of the SF36) in age groups (40-49, 50-69 and ≥ 70 years) over the study time. **RESULTS:** A total of 154 total knee arthroplasties were identified; 63.6% were females, average age was 63.7 years (standard deviation [SD] = 10.2, range 41-85 years), and the average body mass index (BMI) was 31.8 kg/m² (SD = 7.2). Compared to those ≥ 70 years old, the physical function after surgery of those age 40-49 years was not significantly different, while those aged 50-69 years old were significantly better, in a fully adjusted model (controlling for comorbidities). Patient factors associated with lower physical function recovery were back pain (β 3.3, 95% CI 0.81 - 5.79) and preoperative physical function (β 0.39, CI 0.25 - 0.52). **CONCLUSIONS:** Preoperative reporting of previous back pain and low preoperative physical function were the only modifiable patient factors significantly associated with low physical function outcome after surgery. Younger (40-49 year) and older (≥ 70 years age) patients had similar levels of physical function after surgery whereas those considered to be middle-aged (50-69 years) had significantly higher post-surgery function.

PMS61

KNEE ARTHRITIS: A CONFIRMED BURDEN

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OBJECTIVES: To evaluate everyday disability (in the broad sense of the term) due to knee arthritis in a population whose diagnosis has recently been confirmed. According to an epidemiological study conducted in France, the prevalence of symptomatic knee arthritis is estimated as 7.6%, about 2 million patients. **METHODS:** Prospective, non-interventional evaluation. 100 French doctors (rheumatologists and GP) recruited patients who had consulted them spontaneously and for whom knee arthritis was diagnosed. The disability generated was evaluated by means of the B  Ne'S questionnaire. **RESULTS:** 456 subjects were deemed eligible for evaluation. The sex ratio favoured women (65%). The average age of the population was 65.16 \pm 10.9 years. 35% declared that they were active. The average BMI of the population was 27.75 \pm 4.9; the proportions for men and women were respectively: 27% and 34% < 25, 46% and 34% between 25 and 30, 21% and 32% > 30. The mean score of the burden was found to be 30.04 \pm 17.8. The score differed according to sex: 31.33 \pm 16.9 against 28.34 \pm 18.9 ($p < 0.05$). The score also differed according to BMI: 26.11 \pm 17.4 if < 25, 30.8 \pm 18.1 between 25 and 30 and 33.6 \pm 17 if > 30 ($p < 0.01$). The most affected dimensions were autonomy, leisure and psychology. The effect on the budget dimension was 6 times greater for active patients compared to inactive patients. The monthly expenses to be paid by the patient differed depending on the sex:   31.09 for women and   23 for men (not significant). **CONCLUSIONS:** This evaluation confirms the impact of knee arthritis in the everyday life of subjects who suffer from it. 35% of subjects are active, and the negative impact on work is liable to grow in view of the ageing of the population and the longer working lives in developed countries.

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EXAMINING RESPONSIVENESS OF A COMPUTER ADAPTIVE TEST FOR CEREBRAL PALSY FOLLOWING MUSCULOSKELETAL SURGERY

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OBJECTIVES: Item response theory based computerized adaptive testing offers opportunity to measure health outcomes efficiently and economically. The Cerebral Palsy Computer Adaptive Tests (CP-CATs) are parent-reported questionnaires developed to assess physical functioning in children and adolescents with CP. Concurrent validity and reliability of CP-CATs have already been established. Prior to using them in research or clinical practice, it is important to examine their responsiveness as compared to the standard measure. The Pediatric Outcomes Data Collection Instrument (PODCI) is traditionally used to measure health and functional outcomes. Children and adolescents with CP often undergo musculoskeletal surgery to improve their functioning and health related quality of life (HRQOL), and therefore this serves as an apt paradigm to examine responsiveness of CP-CATs for activity, pain and global health with the corresponding PODCI measures. **METHODS:** Ten sites across U.S. recruited patients two to twenty years of age who underwent musculoskeletal surgery between April 2009 and August 2013. Parents or other proxy respondents completed the CP-CATs and PODCI preoperatively and postoperatively at 6, 12 and 24 months. Change from baseline analyses at six months was performed for $n=247$ -252, at twelve months for $n=211$ -217 and at twenty-four months for $n=120$ -123 subjects. Effect size (ES) and Standardized Response Mean (SRM) values were calculated for the CP-CATs and the comparable PODCI measures. **RESULTS:** Overall, ES and SRM of CP-CATs for activity, pain and global health were significantly better than the corresponding PODCI measures for mobility, sports, pain and global health at 6 and 12 months. At 24 months, CP-Activity CAT was more responsive than PODCI mobility and sports, and CP-Pain CAT's responsiveness was similar to PODCI pain. **CONCLUSIONS:** Results suggest that the CP-CATs may be more responsive to functional changes and HRQOL following musculoskeletal surgery in children and adolescents with CP, especially in the first 12 months post-surgery.

PMS63

HEALTH-RELATED QUALITY OF LIFE OF PATIENTS WITH RHEUMATOID ARTHRITIS IN KOREA: THE KOREA NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY

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OBJECTIVES: Little is known about the health-related quality of life (HRQoL) for rheumatoid arthritis (RA) in Korean population. Several studies discovered quality of life of RA patients in Korea using localized resources, not nationwide one. The aim of this study was to estimate HRQoL of Korean RA patients and also discover education and treatment status of them based on nationally representative data. **METHODS:** This study is a cross-sectional analysis of adults who participated in 4th (2007-2009) and 5th (2010-2011) Korean National Health and Nutritional Examination Survey (total, 42,347 participants). HRQoL was measured by EuroQol five-dimension (EQ-5D) and its mean score in Korean RA patients was investigated and compared with normal population. Multivariate linear regression was performed at p -value of 0.05 with the use of SAS software, version 9.2. **RESULTS:** Among 42,347 participants, 679 participants, 1.88% had diagnosed of RA and their mean EQ-5D score was 0.82. Among 679 RA patients, 288 patients (42.42%) have been treated and 25 patients (3.68%) educated in arthritis. The mean EQ-5D score of normal population was 0.93. We found that RA patients in Korea had significantly lower EQ-5D score (0.028, p -value=0.002) compared with that of normal population in Korea, after controlling for age, sex, body mass index (BMI), education, house income, marital status, smoking, alcohol, RA treatment, and education in arthritis. Compared EQ-5D score of RA patients who were in treatment to those not in treatment, no statistically significant difference was found. **CONCLUSIONS:** Less than 50% of RA patients were treated and only 4% were educated about their disease. RA is found to be negatively related with HRQoL in Korea population based on nationwide data. This study discovered nationwide information on RA: education and treatment status of RA patients as well as difference of HRQoL scores between RA patients and non-RA patients in Korea.

PMS64

THE ASSOCIATION BETWEEN DEPRESSION, HEALTH-RELATED QUALITY OF LIFE (HRQOL), AND DISABILITY STATUS AMONG ADULTS WITH ARTHRITIS

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OBJECTIVES: Limited information currently exists regarding the additional influence of depression on health-related quality of life (HRQOL) and disability status among adults with arthritis. This study aimed to determine the relationship between depression, HRQOL and disability status of adults with arthritis in the United States (US). **METHODS:** A cross-sectional design using the 2011 Behavioral Risk Factor Surveillance System (BRFSS) data was utilized. The study sample comprised of adults (≥ 18 years) with arthritis. Multivariate logistic regression models were fitted to the data to examine the association between depression and different components of HRQOL (physical health, mental health, activity limitation due to poor physical/mental health, and general health status), and disability status among adults with arthritis. Survey analyses were conducted using SASv9.3 (PROC SURVEY procedures). **RESULTS:** The study sample comprised of 168,483 individuals with arthritis, of which 45,758 were also diagnosed with depression. Adults with arthritis and depression were 84% less likely to report better mental health (<14 mentally unhealthy days) and 37% less likely to report better physical health as compared to those with arthritis only, after controlling for demographics and health-related covariates. Adults with arthritis and depression were 41% less likely to report good health status as compared to those with arthritis only. Adults with arthritis and depression were 1.4 times more likely to be disabled as compared to adults with arthritis only. The estimated odds of being disabled were 64% lower among adults with arthritis who reported being in good health as compared to those in poor health. **CONCLUSIONS:** The results of the study suggest that depression among adults with arthritis is associated with reduced HRQOL. Screening for depression can be incorporated in routine clinical care of adults with arthritis so that early diagnosis of depression can result in improvement in their HRQOL.

PMS65

IMPACT ON HEALTH STATUS AND DISEASE SPECIFIC QUALITY OF LIFE OF TOFACITINIB IN PATIENTS WITH INADEQUATE RESPONSE TO NON-BIOLOGICAL DISEASE-MODIFYING ANTIRHEUMATIC DRUGS (DMARD) VERSUS ANTI-TUMOR NECROSIS FACTOR DRUGS (ANTI-TNF) IN COLOMBIA

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OBJECTIVES: To analyze the impact on health status and disease specific quality of life with tofacitinib for rheumatoid arthritis in patients with inadequate response to a non-biological DMARD vs anti-TNF in Colombia. **METHODS:** We use the change from baseline in the Health Assessment Questionnaire-Disability Index (HAQ-DI) as effectiveness measure and grouped by disease severity levels (0.5 difference) in order to infer the changes in Quality of Life obtained with Tofacitinib and the anti-TNF available in Colombia (adalimumab, certolizumab, etanercept, golimumab and infliximab). Comparison between anti-TNF and tofacitinib (5mg BID) was done directly to adalimumab (heat-to-heat study) and indirectly (Bucher's indirect comparisons adjusted method) using methotrexate as reference therapy against the rest anti-TNF. The relationship between the health status and Quality of life improvement were taken from P  ntek M 2008 and projected at 52 weeks through a discrete event model that simulates six cohorts of 1,000 patients (each per treatment option). The model's result were tested by randomly changing the HAQ levels (basal and weekly mean change) and utility gains assuming a normal distribution. The results obtained with the anti-TNF's were grouped and weighted given their market share as reported in the SISMED by the Health Ministry. **RESULTS:** Percent reduction in HAQ-DI score at 3, 6, 9 and 12 months from baseline were 61.9, 48.7, 65.2 and 53.2% with tofacitinib; and 49.5, 42.7, 57.1 and 47.1% with anti-TNF (t test at 52 weeks, $p < 0.001$). As result of these reductions, quality of life at week 52 increased from 0.50 to 0.78 (0.28) with tofacitinib and from 0.5 to 0.70 (0.20) with anti-TNF. **CONCLUSIONS:** The superior reduction in HAQ-DI scale at 52 weeks obtained with tofacitinib in RA patients with inadequate response to a non-biological DMARD results in a greater improvement in disease specific quality of life, compared to anti-TNF available in Colombia.